

Work Order ID 79253

January-24-12 10:58:52 AM

79253

Page 1

Item ID: D206-642-151

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Replacement Skidtube

Stop *NS2*

Start Date: 24/01/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 15/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: M.C.J

Date: 12/01/25 Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3804

A

IIN-D206-642

O

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-151

CHG001

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00							
110									
Skidtubes	Memo	0.00							
Skidtubes	1-Deburr Fwd edge of tube								
	2- Remove ridge on inside of Fwd edge of tube as per Dwg D3804								
	3-Weld Fwd Cap as per Dwg D3804. Use aluminum rod. Grind D2647 to fit as required. Pick: Qty Part Number Description Batch A/R Aluminum Rod M20164 JBE 12/02/08								
	4-Grind weld flush to cap on top surface only								
	5-Cut Aft end as per dwg D3804 from front of tube and Deburr								
	6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D3804								
	7-Open holes for Aft end cap as per Dwg D3804 with #30 Drill Bit using DT8025.								
	8-Drill pilot holes using Dt8166 & DT8169D & DT9771.								
	9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support.								
	10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.								

CF 12-2-28

12/03/01

SAD 12-03-01

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--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads.

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D3804

13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder

14-Remove indexing edge using DT8741 as per Dwg D3804

15-C'sink GHW rivet holes as per Dwg D3804

16- Open Aft cap hole #6.
****no wearplate holes for this skidtube****

17-Deburr tube and blow out chips from inside the tube

SAD 12-03-01

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

S. 12/03/02

W/O:		WORK ORDER CHANGES					
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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							
Hand Finishing									
150	QC3- Inspect Part Finish	0.00							
150									
QC	Memo	0.00							
Quality Control									
160	Skidtubes	0.00							
160									
Skidtubes	Memo	0.00							
Skidtubes	1-Open holes to finished size as per Dwg D3804, (without cutting fluid)								
	2-C'sink crossbolt spacer holes as per Dwg D3804(without cutting fluid)								
	3-Deburr and blow out all chips from inside the tube								

W/O:		WORK ORDER CHANGES					
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1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 *170* QC Quality Control	QC6- Inspect dimensions to drawing Memo	0.00 0.00							
180 *180* Skidtubes Skidtubes	Skidtubes Memo 1-Locate, install and rivet doublers as per Dwg D3804. Micro-shave rivets as required 2-Bond D2654-1 web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting Start Date: <u>12-03-02</u> Time: <u>2:00</u> Finish Date: <u>12-03-05</u> Time: <u>7:30</u> Pick: Qty Part Number Description Batch A/RSikaflex-291 <u>M119995</u> Sikaflex expire date: <u>2012-08-13</u>	0.00 0.00							

DP

12-3-2

7

SAD

12-03-02

5

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1

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Required Date: 15/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							
190									
QC	Memo	0.00							
Quality Control									

1 0 BE 12/03/05

W/O:		WORK ORDER CHANGES					
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1

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Required Date: 15/03/2012 Req'd Qty: 1.00

1

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

200

0.00

200

Skidtubes

Skidtubes

0.00

Memo

1-remove alodine from around hole and prepare for welding

2-Prep per QSI 005 and Insert D2649 crossbolt spacers. Weld as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

QtyPart NumberDescriptionBatch

A/RAluminum Rod M120164

3-Grind welds flush as per Dwg D3804.

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D3804. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/RSS Rod NONE BE 12/03/05

5-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D3804. Deburr

BE 12/03/05

BB 12/03/05

DP 12-3-5

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Start Date: 24/01/2012 **Start Qty:** 1.00

*** 1 ***

Cust Item ID:

Required Date: 15/03/2012 **Req'd Qty:** 1.00

*** 1 ***

Customer:

Reference:

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

210

0.00

210

HandFinishing

0.00

HandFinish

Memo

Hand Finishing

Install D2680-041 Nut Plate as per Dwg D3804

215

QC9-Inspect visual per QSI004- Fusion Welds

0.00

215

QC

Memo

0.00

Quality Control

220

QC10- Inspect visual per QSI004- ground welds

0.00

220

OC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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1

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Required Date: 15/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

230

QC5- Inspect part completeness to step on W/O

0.00

230

QC

Memo

0.00

Quality Control

240

Pressure Wash per QSI005 4.3

0.00

240

HandFinish

Memo

0.00

Hand Finishing

1X of M-12/03/06

250

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

250

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

7h20
320°F
7h50

1 Q @ M-12/03/07

M120 222

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Customer:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC3- Inspect Part Finish	0.00							
260									
QC	Memo	0.00							
Quality Control									
270		0.00							
270	HandFinishing								
HandFinish	Memo	0.00							
Hand Finishing	1-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D3804. Clean excess adhesive.								

113H d M 12/03/09

112H d M 12/03/09

RH 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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 Required Date: 15/03/2012 Req'd Qty: 1.00 ***1*** Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	HandFinishing	0.00							
280									
HandFinish	Memo	0.00							
Hand Finishing.	1-Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive A/RSikaflex-291 <u>AA 119999</u> Sikaflex expire date: <u>12/08</u>								
	2- Install wearplate as per dwg								
	2-Wing Walk as per Dwg D3804 and QSI 005 4.4 Batch: <u>14112012</u>								
290	QC3- Inspect Part Finish	0.00							
290									
QC	Memo	0.00							
Quality Control									

IRH d BL 123-12

5 12/13/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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300

QC5- Inspect part completeness to step on W/O

0.00

300

QC

Memo

0.00

Quality Control

310

Packaging

0.00

310

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D206-642-151

Location: _____

PPP Rev: _____

320

QC21- Final Inspection - Work Order Release

0.00

320

QC

Memo

0.00

Quality Control

12-03-14

W/O:		WORK ORDER CHANGES					
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79253

D206-642-151

Required Qty: 1.00

IPP

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2620		Manufactured	No			110	Each	8.0000	1	1			
D2620 Skidtube, 206 Skidtube													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG				8					
					71617			2					
					77997			6					
D2647		Manufactured	No			110	Each	133.0000	1	1			
D2647 Cap													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG002				133					
					73826			24					
					75482			109					
CR3212-4-04		Purchased	No			180	Each	10,198.00	52	52			
CR3212-4-04 Cherry Rivet													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST331				364					
					116471			78					
					117816			3					
					118686			1					
					118840			16					
					119017			256					
					119075			10					
				st510				9834					
					119075			9834					

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Work Order ID: 79253

79253

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 15/03/2012

Start Qty: 1.00

Required Qty: 1.00

D2654-1 Manufactured No

180 Each 25.0000 1 1

D2654-1

Web

**

SAD 12-03-02

Location

Loc Qty

Loc Code

LG

25

77278

2

77279

10

77280

3

77281

10

379541

①

D3286-1 Manufactured No

180 Each 231.0000 2 2

D3286-1

Doubler

**

SAD 12-03-01

Location

Loc Qty

Loc Code

LG002

233

74872

6

78014

109

ST046

-2

76772

116

②

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January-24-12 10:58:56 AM

Page 3

Work Order ID: 79253

79253

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 15/03/2012

Start Qty: 1.00

Required Qty: 1.00

D2649 Manufactured No

200 Each 559.0000 19 19

D2649

Cross Bolt Spacer

BB 12/03/05
B 79504 19

Location Loc Qty Loc Code

LG	40	
77574	40	
LG001	519	
65317	1	
68224	2	
68507	11	
71355	2	
72704	2	
72841	11	
73390	8	
73857	21	
73858	53	
73859	4	
73860	4	
78020	400	

D3286-3 Manufactured No

200 Each 128.0000 2 2

D3286-3

Spacer

BB 12/03/05
B 79557 2

Location Loc Qty Loc Code

LG	100	
78015	100	
LG001	28	
74117	1	
76773	27	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 4

January-24-12 10:58:56 AM

Work Order ID: 79253

79253

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 15/03/2012

Start Qty: 1.00

Required Qty: 1.00

D2680-041

Manufactured No

210

Each

110.0000

1

1

D2680-041

Nut Plate

**

1 12/03/06

Location

Loc Qty

Loc Code

ST013

14

75479

14

ST019

96

76790

96

CR3212-4-03

Purchased

No

210

Each

1,650.000

2

2

CR3212-4-03

Cherry Rivet

**

2 12/03/06

Location

Loc Qty

Loc Code

FP002

660

114859

660

ST331

990

110139

2

119017

988

AN960JD416

NAS1149D0463I

Purchased

No

210

Each

0.0000

1

1

AN960JD416

Washer

**

1118384 (x1) MU 12/03/09

CCR264SS3-3

Purchased

No

210

Each

885.0000

2

2

CCR264SS3-3

Cherry Rivet

**

2 12/03/06

Location

Loc Qty

Loc Code

ST331

885

113973

2

117849

135

119017

748

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January-24-12 10:58:56 AM

Work Order ID: 79253

79253

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 15/03/2012

Start Qty: 1.00

Required Qty: 1.00

MS27039-4-06

Purchased

No

210

Each

277.0000

1

1

MS27039-4-06

Screw

**

Handwritten: 12/03/09

Location

Loc Qty

Loc Code

ST292

277

119075

277

Handwritten: ✓

D2651-1

Manufactured

No

270

Each

527.0000

6

6

D2651-1

Plug

**

Handwritten: B78584 (v6) 12/03/09

Location

Loc Qty

Loc Code

FP001

413

57869

1

66445

10

69018

2

70827

2

70839

8

70942

14

71037

53

73827

23

FP-A

114

77559

114

78124

300

D2651-3

Manufactured

No

270

Each

2,547.000

6

6

D2651-3

O-Ring

**

Handwritten: 12/03/09

Location

Loc Qty

Loc Code

FP001

547

61962

12

73828

535

Handwritten: x 6

FP-A

2000

78126

2000

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Picklist Print

January-24-12 10:58:56 AM

Work Order ID: 79253

79253

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 15/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3873-1

Manufactured No

280

Each

509.0000

14

14

D3873-1

Bushing

B379561 (x14) JH 12/03/09

Location

Loc Qty

Loc Code

ST067

509

64760

1

68247

4

73829

19

73830

2

78017

483

D2646

Manufactured No

280

Each

96.0000

1

1

D2646

Aft Cap

B378018 (x1) JH 12/03/09

Location

Loc Qty

Loc Code

FP002

96

62678

5

68280

5

70945

1

71038

4

71070

2

73294

1

73825

78

D3805-041

Manufactured No

280

Each

0.0000

1

1

D3805-041

Wearplate Assembly Fwd, Low Gear

1 BR 12-3-12

78004

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 7

January-24-12 10:58:56 AM

Work Order ID: 79253

79253

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 15/03/2012

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-08

Purchased

No

280

Each

1,907.000

2

2

MS27039-1-08

Screw

**

HL 12/03/09

Location

Loc Qty

Loc Code

ST291

1907

117423

77

118910

2

119075

328

119109

500

120308

1000

XZ

MS21042L3

Purchased

No

280

Each

5,641.000

7

7

MS21042L3

Nut

**

HL 12/03/09

Location

Loc Qty

Loc Code

ST300

5641

117441

16

117885

32

118451

5

118927

3

119017

5120

119075

465

XZ

D3805-045

Manufactured

No

280

Each

7.0000

1

1

D3805-045

Wearplate Assembly Aft, Low Gear

**

B78011 (x1) HL 12/03/09

Location

Loc Qty

Loc Code

FP001

7

73817

1

74896

1

76786

5

AN960JD10L

NAS1149D0332J

Purchased

No

280

Each

0.0000

2

2

AN960JD10L

Washer

**

M1120644 (x2) HL 12/03/09

January-24-12 10:58:56 AM

Shop Packet Print

Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 8

January-24-12 10:58:56 AM

Work Order ID: 79253

79253

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 24/01/2012

Required Date: 15/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN3-37A Purchased No

280 Each 1,231.000 7

AN3-37A

Bolt

**

7
H 12/03/09

Location

Loc Qty

Loc Code

ST353

1231

117619

4

119086

1227

NAS1149D0363J

Purchased No

280 Each 3,670.000 7

NAS1149D0363.J

Washer

**

V7
H 12/03/09

Location

Loc Qty

Loc Code

ST298

3670

117601

61

118077

1

118612

18

119537

1041

120142

1549

120308

1000

V7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	Qty -041	Qty -043	Part Number	Description
1	X		D3804-041	SKIDTUBE ASSEMBLY, 206 A/B LOW
2		X	D3804-043	SKIDTUBE ASSEMBLY, 206 A/B HIGH
5	1	1	D2600-1-160	EXTRUSION
6	1	1	D2646	AFT CAP
7	1	1	D2647	CAP
8	19	20	D2649	CROSS BOLT SPACER
9	6	8	D2651-1	PLUG
10	6	8	D2651-3	O-RING
11		1	D2654-3	WEB
12	1		D2654-1	WEB
13	1	1	D2680-041	NUT PLATE
14	2	2	D3286-1	DOUBLER
15	2	2	D3286-3	STUD
21	2	2	AN960JD10L	WASHER
22	1	1	AN960JD416	WASHER
23	2	2	CCR264SS3-3	RIVET
24	2	2	CR3212-4-03	RIVET
25	52	52	CR3212-4-04	RIVET
26	2	2	MS27039-1-08	SCREW
27	1	1	MS27039-4-06	SCREW

NOTES

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: 12.5 lb
- 9) WELD PER DART QSI 004
- 10) BENDING: DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 11) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 12) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

REV.	NEW ISSUE	DESCRIPTION	MB	08.07.07
DESIGN		DART AEROSPACE USA, INC PORT HADLOCK, WA DRAWING NO. D3804 TITLE SKIDTUBE ASSEMBLY, 206A/B COPYRIGHT © 2005 BY DART AEROSPACE USA, INC <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	BY	DATE
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MFG. APPR.				
APPROVED				
DE APPR.				
DATE	08.07.07			

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 09-03-03
 per ECN 09-536

79253 M.C.J
 12/01/25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

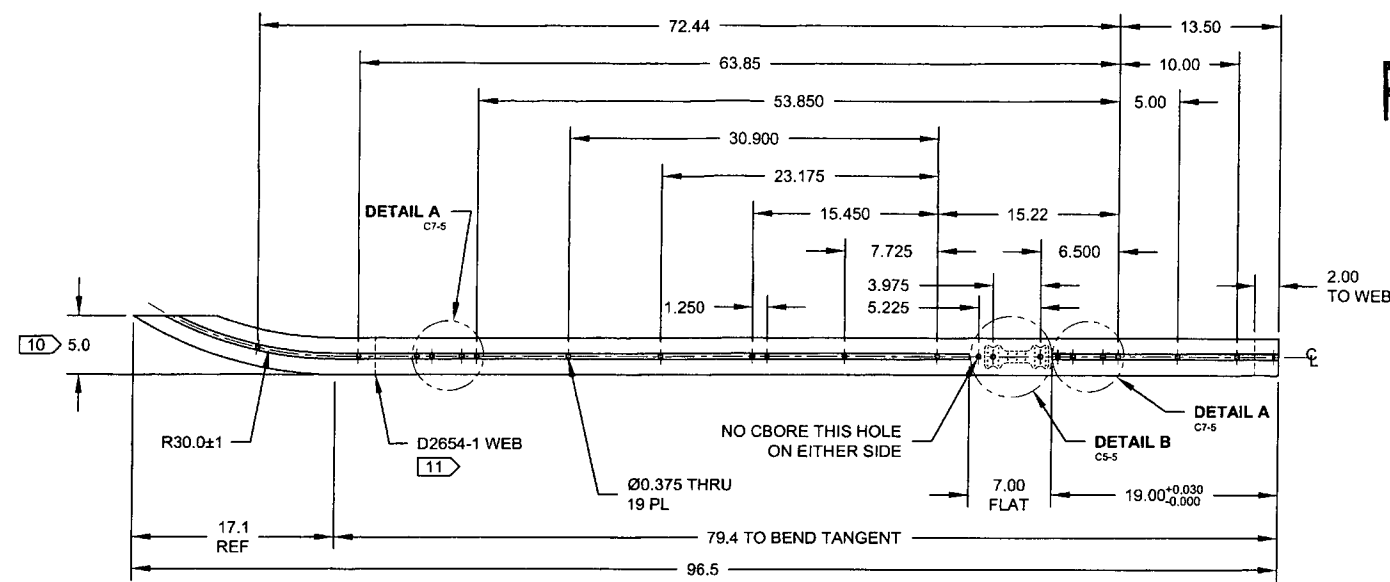
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

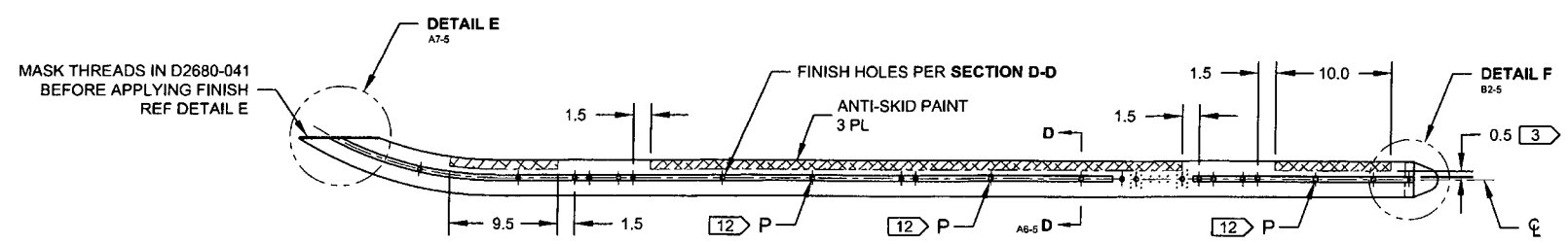
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09.03.03



D3804-041 BENDING/DRILLING DETAIL



D3804-041 ASSEMBLY/FINISHING DETAIL

DESIGN	97	DART AEROSPACE USA, INC	
DRAWN	97	PORT HADLOCK, WA	
CHECKED	97	DRAWING NO.	REV. A
MFG. APPR.	97	D3804	SHEET 2 OF 5
APPROVED	97	TITLE	SCALE
DE APPR.	97	SKIDTUBE ASSEMBLY, 206A/B	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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4 09-03-03



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DRAWN	J		SHEET 3 OF 5
CHECKED	97		
MFG. APPR.	BE		
APPROVED	97		SCALE
DE APPR.	97		NTS
DATE	08.07.07		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

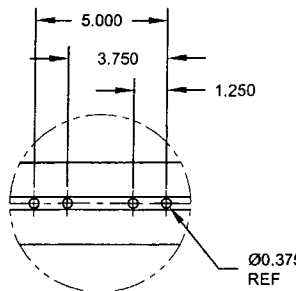
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

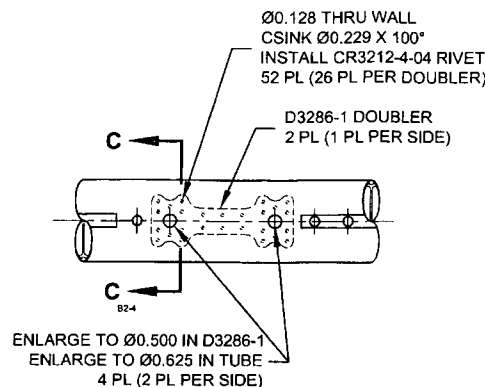
NOTE: Date & initial all entries

79253

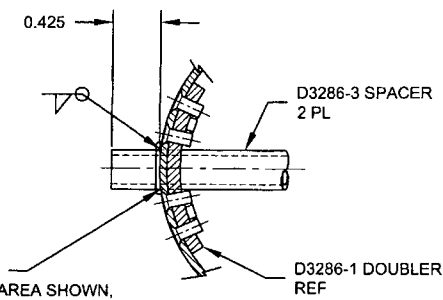
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CP 09.03.07



DETAIL A
D6-2
C2-2
D6-3
C2-3
SCALE NONE

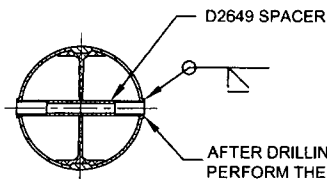


DETAIL B
C3-2
C3-3
SCALE NONE



- TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH OUTSIDE SURFACE OF ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO Ø0.500
 4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.03 X 45°
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE AND GRIND FLUSH

SECTION C-C
C6-4
PARTIAL SECTION
SCALE NONE



- AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:
1. CHAMFER HOLE 0.03 X 45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. CBORE TO Ø0.313 X 0.75 DP (EXCEPT WHERE INDICATED)

SECTION D-D
A4-2
A4-3
FOR Ø0.375 HOLES ONLY
SCALE NONE

DESIGN	97	DART AEROSPACE USA, INC	
DRAWN	J	PORT HADLOCK, WA	
CHECKED	JP	DRAWING NO.	REV. A
MFG. APPR.	JP	D3804	SHEET 4 OF 5
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W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

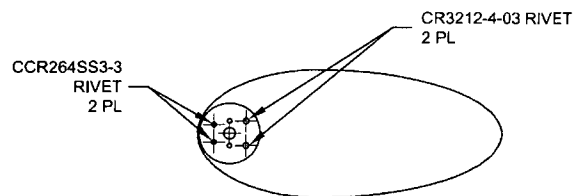
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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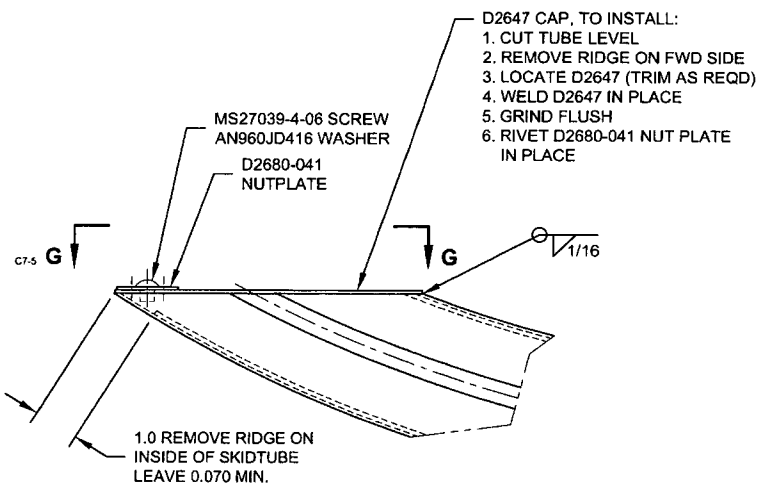
NOTE: Date & initial all entries

79253

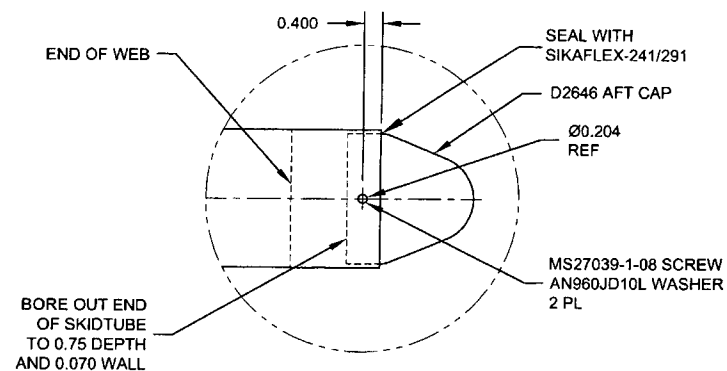
RELEASED
09.03.03



VIEW G-G
SCALE NONE
A7-5



DETAIL E
SCALE NONE
B7-2
B7-3



DETAIL F
SCALE NONE
B2-2
B2-3

DESIGN	91	DART AEROSPACE USA, INC	
DRAWN	1	PORT HADLOCK, WA	
CHECKED	2	DRAWING NO.	REV. A
MFG. APPR.	3	D3804	SHEET 5 OF 5
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DE APPR.	5	SKIDTUBE ASSEMBLY, 206A/B	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 283

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 79243
Part number: A206-642-151
Description: Skid tube
Welding Process: Tig[☒] Mig[]
Base material: Alum.
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier David Nival Date of Test Coupon 12.02.22

Welder Barclay Elliott Date of Test Coupon 12.02.22

The above named individual is qualified in accordance with AWS D17.1.2001 to weld